



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant: Eric D. Morrison, et al. Examiner: Callie Shosho  
Serial No. 10/010,926 Group Art Unit: 1714  
Filed: November 09, 2001 Docket No. 456.003US1  
Title: LIQUID INKS COMPRISING TREATED COLORANT PIGMENTS


**MAIL STOP ISSUE FEE**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

- ☒ Form PTOL-85B (1pg), plus one copy
- ☒ Communication Re: Issue Fee Transmittal, with Authorization for Fees
- ☒ Copy of Notice of Allowance and Issue Fee Due, Notice of Allowability, Examiner-Initiated Interview Summary, Examiner's Amendment, and Determination of Patent Term Adjustment
- ☒ Transmittal Sheet
- ☒ Return postcard

**Please consider this a PETITION FOR EXTENSION OF TIME for sufficient number of months to enter these papers if an additional extension of time is deemed necessary by the Office. Authorization is hereby given to charge Deposit Account Number 50-1391 if such additional extension is necessary.**

**MARK A. LITMAN & ASSOCIATES, P.A.**  
York Business Center, Suite 205, 3209 W. 76<sup>th</sup> St.  
Edina, MN 55435 (952-832-9090)

By:   
Atty: Mark A. Litman  
Reg. No. 26,390

CERTIFICATE UNDER 37 C.F.R. 1.8: The undersigned hereby certifies that this Transmittal Letter and the paper, as described herein, are being deposited in the United States Postal Service, as first class mail, with sufficient postage, in an envelope addressed to: Mail Stop Issue Fee, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450 on September 8, 2004.

Mark A. Litman  
Name

  
Signature



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**COMMUNICATION RE: ISSUE FEE TRANSMITTAL**

**MAIL STOP ISSUE FEE**

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P.O. Box 1450  
Alexandria, VA 22313-1450

In response to the "Notice of Allowance and Issue Fee Due", dated August 19, 2004, (see enclosed copy), we submit the signed Issue Fee Transmittal along with authorization to withdraw \$1,330.00 from Deposit Account No. 50-1391 for the issue fee, \$300.00 for the publication fee and \$15.00 for 5 additional copies.

Applicant assumes the application is now in proper order and in condition for issuance. Please direct any inquiries to the undersigned attorney at (952) 832-9090.

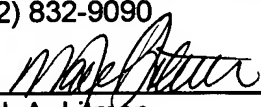
Respectfully submitted,

ERIC D. MORRISON, et al.

By Their Representatives,

MARK A. LITMAN & ASSOCIATES, P.A.  
York Business Center, Suite 205  
3209 West 76<sup>th</sup> Street  
Edina, Minnesota 55435  
(952) 832-9090

Date: September 8, 2004

By:   
Mark A. Litman  
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Mark A. Litman  
Name

  
Signature

# Notice of Allowability



Application No.

10/010,926

Examiner

Callie E. Shosho

Applicant(s)

MORRISON ET AL.

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Appeal Brief filed 5/21/04 and telephonic interview conducted 8/6/04.
2. ☒ The allowed claim(s) is/are 1,3-6,8 and 10.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☒ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached *Statement of Reasons for Allowance* ~~EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152)~~ which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date 8/6/04.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

**Examiner-Initiated Interview Summary**

Application No.

10/010,926

Applicant(s)

MORRISON ET AL.

Examiner

Callie E. Shosho

Art Unit

1714

**All Participants:**(1) Callie E. Shosho.(2) Mark Litman.**Status of Application:** Allowed

(3) \_\_\_\_\_

(4) \_\_\_\_\_

**Date of Interview:** 8/6/04**Time:** \_\_\_\_\_**Type of Interview:**☒ Telephonic☐ Video Conference☐ Personal (Copy given to: ☐ Applicant ☐ Applicant's representative)Exhibit Shown or Demonstrated: ☐ Yes ☐ No

If Yes, provide a brief description:

**Part I.**

Rejection(s) discussed:

Claims discussed:

11-16

Prior art documents discussed:

**Part II.****SUBSTANCE OF INTERVIEW DESCRIBING THE GENERAL NATURE OF WHAT WAS DISCUSSED:**

*The examiner's amendment was agreed to and authorized by Mr Litman in order to (i) correct minor typing error in the specification and (ii) cancel claims 11-16 in order to overcome the rejection of record with respect to these claims.*

**Part III.**

- ☒ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview directly resulted in the allowance of the application. The examiner will provide a written summary of the substance of the interview in the Notice of Allowability.
- ☐ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview did not result in resolution of all issues. A brief summary by the examiner appears in Part II above.

(Examiner/SPE Signature)

(Applicant/Applicant's Representative Signature – if appropriate)

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Examiner's Amendment

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

(1) In the specification, page 7, line 23, after "to" and before "Da", delete "500,00" and insert "500,000".

(2) Cancel claims 11-16.

2. Authorization for this examiner's amendment was given in a telephone interview with Mark Litman on 8/6/04.

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**Statement of Reasons for Allowance**

3. Upon reconsideration, and in view of applicants' arguments as set forth in the Appeal Brief filed 5/21/04 and in light of the cancellation of claims 11-16 (see paragraph 1 above), present claims 1, 3-6, 8, and 10 are allowable over the "closest" prior art Uytterhoeven et al. (U.S. 4,663,265) and Baker et al. (U.S. 5,698,616) for the following reasons:

Uytterhoeven et al. disclose process for making liquid developer, i.e. ink, wherein the process comprises the steps of dissolving first polymer in solvent with Kauri-Butanol number greater than 30, dispersing pigment particles in the polymer solution to form pigment dispersion, and removing solvent to form treated colorant pigment with outer layer of first polymer. However, there is no disclosure or suggestion in Uytterhoeven et al. of dispersing the treated colorant pigment in an organosol containing a second polymer carried in carrier liquid having a Kauri-Butanol number less than 30 as presently claimed. Rather, Uytterhoeven et al. disclose, after forming the treated colorant pigment with outer layer of first polymer, that the first polymer is then reacted with additional polymer. This is in contrast to the present claims that disclose forming treated colorant pigment with outer layer of first polymer and then dispersing the treated colorant pigment in an organosol containing a second polymer. As set forth on pages 11 and 13-14 of the Appeal Brief filed 5/21/04, Uytterhoeven et al. forms a pigment coated with product of the reaction between two polymers with no disclosure of dispersion of pigment coated with first polymer in organosol containing second polymer carried in carrier liquid as presently claimed. Further, it is noted that there is no disclosure in the present claims that the treated colorant pigment is reacted with additional polymer as set forth in Uytterhoeven et al. While the present claims are open with respect to the process of making the ink, i.e. process of making a liquid ink

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“comprising”, the claims are not open to additional steps wherein an additional polymer is reacted with the treated colorant pigment. That is, given that step (d) requires dispersing “said treated colorant pigment” in an organosol containing a second polymer carried in a carrier liquid wherein “said treated colorant pigment” refers to the treated colorant pigment with outer layer of first polymer in step (c), there is clearly no disclosure or suggestion of reacting the presently claimed treated colorant pigment with an outer layer of the first polymer with additional polymer as required in Uytterhoeven et al. before dispersing in an organosol.

Further, with respect to claim 6, it is noted that Uytterhoeven et al. disclose producing treated colorant by removing solvent from the pigment dispersion which is in direct contrast to present claim 6 which requires precipitating pigment from the dispersion to produce treated pigment with polymer precipitated thereon.

Baker et al. disclose process for making liquid ink by dispersing colorant in organosol containing carrier liquid with Kauri-Butanol less than 30. However, there is no disclosure or suggestion in Baker et al. of pigment surface treated with polymer comprising units derived from at least a nitrogen containing polymerizable monomer as presently claimed and thus, no disclosure or suggestion of process of making liquid ink as required in present claims 1, 3-6, 8, and 10.

Thus, it is clear that Uytterhoeven et al. and Baker et al., either alone or combination, do no disclose or suggest the present invention.

In light of the above, claims 1, 3-6, 8, and 10 are passed to issue.

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**Oath/Declaration**

4. Applicant is now required to submit a substitute declaration or oath to correct the deficiencies set forth below. The substitute oath or declaration must be filed within the THREE MONTH shortened statutory period set for reply in the "Notice of Allowability" (PTO-37). Extensions of time may NOT be obtained under the provisions of 37 CFR 1.136. Failure to timely file the substitute declaration (or oath) will result in **ABANDONMENT** of the application. The transmittal letter accompanying the declaration (or oath) should indicate the date of the "Notice of Allowance" (PTOL-85) and the application number in the upper right hand corner.

The oath or declaration is defective because:

It does not identify the citizenship of each inventor. Specifically, the citizenship of inventor Sang Woo Kim is not identified.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."



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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
8/6/04